Entertainment and enjoyment as media effects

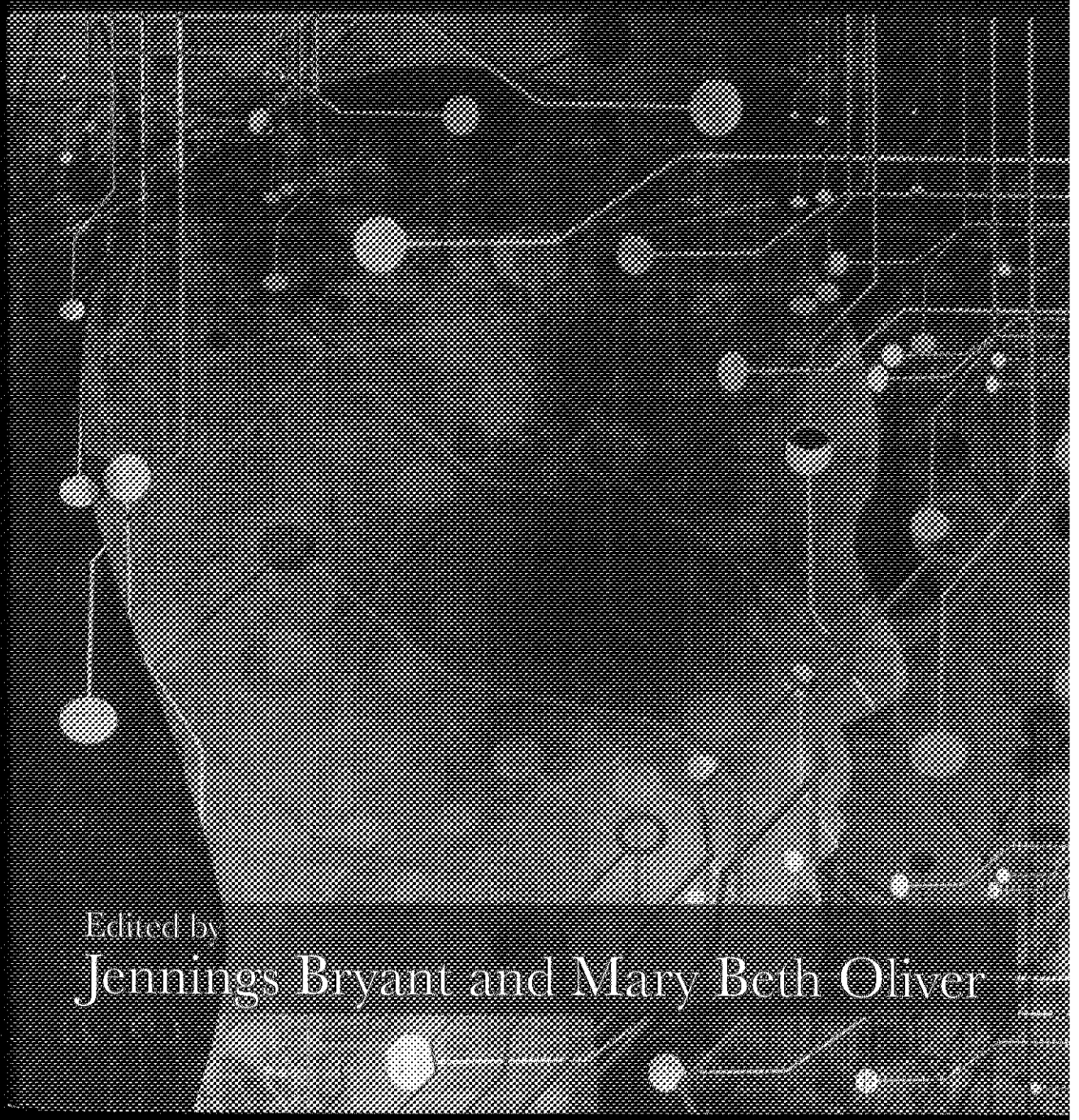
Vorderer, P.A.; Hartmann, T.

published in
Media effects
2009

THIRD EDITION

Media Effects

Advances in Theory and Research



Edited by

Jennings Bryant and Mary Beth Oliver

24

ENTERTAINMENT AND ENJOYMENT AS MEDIA EFFECTS

Peter Vorderer and Tilo Hartmann
VU University Amsterdam

A BRIEF REVIEW OF MEDIA ENTERTAINMENT RESEARCH

Research on media entertainment clearly has become an established field of study within communication science and media psychology. Although entertainment media had been under-researched for several decades, their significance, content, and consumption were never really questioned. Katz and Foulkes (1962) therefore criticized the lack of systematic research on this topic as early as the 1960s. Beginning in the 1970s, empirical research on entertainment has grown considerably, and it has become a booming field since the late 1990s (cf., Zillmann & Vorderer, 2000). The diversity of entertainment media and their consumption by different users and audiences around the globe create a challenge for theory building and empirical research, and scientific results often seem valid for only a short period of time. Early mediated mass entertainment, such as low-cost novels in the second half of the 19th century or picture-rich newspapers in the early 20th century (Engel, 1997), did not stimulate much scientific concern.

The advent of radio entertainment and movie theatres, however, revealed the importance of entertainment to mass societies' elites (e.g., Carey, 1993). Herzog's (1944) survey studies on the motivation of US-American women to listen to radio soap operas may now be seen as early attempts to systematize what was known about entertainment at this time. Radio soap operas were extremely popular in the 1930s and 1940s. Regularly reaching a wide audience, they were produced in an industrialized manner and implemented advanced business models such as product placement. Katz and Foulkes (1962) were the first to elaborate a motivational framework for entertainment consumption by explaining the preference for such media content through "escapism," i.e., the desire of ordinary people to seek refuge from the negative experiences of everyday life with the world of entertainment media. The substantial contribution of their proposal can hardly be overestimated, as they provided an early psychological perspective on media users' motivation to select specific content repeatedly and discussed underlying experiential processes, such as "identification" with media characters. Nevertheless, their seminal work remained rather isolated and atypical within the Social and Behavioral Sciences for a number of years, partly because the academic community did not consider "entertainment" a serious research topic deserving intellectual scrutiny. This was true particularly for academia in Europe, which held elitist preferences for traditional,

i.e., "classic" and "serious" literature and the arts and believed them to be the only appropriate standards of cultural and aesthetic achievement.

The opportunities for empirical research on entertainment did not arise until the 1970s, and occurred for two main reasons. First, political movements of the late 1960s and their accompanying societal change stimulated research explicitly devoted to overcoming elitist and "established" ways of thinking and of evaluating cultural products. These new branches of research sought to reveal the often (or often thought of) ideological quality of mainstream literature and media (cf., Groeben & Vorderer, 1988). Secondly, the field of psychology discovered the relevance of consumption of entertainment for understanding emotion. Comedy, pornography, mediated sports, and other forms of media entertainment trigger affective experiences, which attracted the attention of psychologists, especially that of Percy Tannenbaum (1980) and his mentee, Dolf Zillmann. Zillmann and his early collaborators—most importantly, Jennings Bryant and Joanne Cantor—built upon general foundations from the psychology of emotion and applied experimental methods from psychology to (users of) media entertainment. In doing so, they formed and shaped the beginnings of a systematic, theory-driven inquiry of media entertainment, which still guide and inform contemporary approaches (cf., Bryant, Cantor, & Roskos-Ewoldsen, 2003; Bryant & Miron, 2002; Klimmt & Vorderer, in press; Raney & Bryant, 2002; Vorderer, Klimmt, & Ritterfeld, 2004).

APPROACHING MEDIA ENTERTAINMENT

On the basis of these early approaches this chapter proposes an integrative model of media entertainment and enjoyment. The conceptualization starts from the broad grounds of an ecological perspective, which in turn draws on recent integrative approaches to media entertainment proposed from perspectives such as evolutionary psychology (Miron, 2006; Schwab, 2003), positive psychology (Ryan, Rigby, & Przybylski, 2006; Vorderer, Steen & Chan, 2006), and communication research (Denham, 2004; Frueh, 2002; Vorderer, Klimmt, & Ritterfeld, 2004). Such an ecological perspective regards the user as an organism that exists in a "real" (physical) world but is playfully involved in a "mediated" environment during exposure to media content (Bryant & Miron, 2002). Entertainment, in its broadest sense, is conceptualized as a positive mood-like meta-emotion, which arises from the appreciation of underlying primary emotions (cf., Bartsch, Vorderer, Mangold, & Viehoff, 2008; Frueh, 2002; Wirth & Schramm, 2007). Successful progress towards short- and long-term goals to reach both physiological and psychological life-balance (cf., Damasio, 1999) is seen as a key mechanism of meta-level appreciation.

The User and the Environment

When conceptualizing the media user as a human organism in a specific situational environment (cf., Zillmann & Bryant, 1985a), the term "environment" refers not only to the outer, but also the inner environment ("internal milieu," Damasio, 1999, p. 135). The core of the human organism is the brain, which responds and reaches out to both internal and external environment changes (Damasio, 1999). Therefore, instead of focusing on either the individual or the environment, we should approach psychological processes, like enjoyment, by focusing on underlying brain-environment relationships

(cf. Lazarus & Folkman, 1987; Scherer, 2005). The human brain constantly evaluates external and inner environment events ("appraisals;" Roseman & Smith, 2001) that become salient due to certain situational features ("stimulus events," Scherer, 2005, p. 700; "appraisal detectors," Smith & Kirby, 2001). These events become relevant and meaningful (Skaggs & Baron, 2006) because they seem to concern the organism's well-being (Lazarus & Folkman, 1987). Emotions stem from such appraisals of relevant events: "The role of emotions is to provide self-referential value-coding of [internal and external] world events" (Miron, 2006, p. 344). Different layers of the brain are involved in self-referential evaluations of stimuli events, depending on the type of stimulus event (cf. van Reekum & Scherer, 1997; Damasio, 1999). Some events, particularly those on the sensory-motor level (Scherer, 2001), trigger simple and innate appraisal reactions controlled by the "instinctual brain" (cf. van Reekum, 2000; Miron, 2006). However, affective responses are not restricted to simple instincts and stimulus-response sequences. Processes that involve learned response schemes or even plans and action strategies at the conceptual level are thought to provoke more complex appraisal reactions (cf. Scherer, 2001; Miron, 2006).

According to van Reekum (2000, section 1.2),

> one finds a high degree of convergence [in literature] with respect to the appraisal dimensions or criteria postulated by different theories. These include the perception of a change in the environment that captures the subject's attention (novelty and expectancy), the perceived pleasantness or unpleasantness of the stimulus or event (valence), the importance of the stimulus or event to one's goals or concerns (relevance and goal conduciveness or motive consistency), the notion of who or what caused the event (agency or responsibility), the estimated ability to deal with the event and its consequences (perceived control, power or coping potential), and the evaluation of one's own actions in relation to moral standards or social norms (legitimacy), and one's self-ideal.

In general, positive affect results from relationships that are evaluated as both motivationally relevant and congruent, because they conform to a higher goal or are intrinsically pleasurable. If media entertainment is considered to be a positive affective state (cf., "positive meta-emotion," Bartsch, Mangold, Viehoff, & Vorderer, 2006; Bartsch et al., 2008; Wirth & Schramm, 2007), the perception of relevant and beneficial brain-environment-relationships should lie at media entertainment's core.

At the Heart of Appraisals: Life-Balance

Evolutionary theorists argue that "the true object of all the vital mechanisms is [. . .] survival to reproduce" (Schulkin, 2004, p. 22). Therefore, human organisms pursue a basic need for bodily integrity, that is, the assured proper functioning of their inner environment, which is protected and separated from the outer environment by an intact tissue (cf., Damasio, 1999). Thus, the struggle for life-balance, i.e., the constant attempt to avoid severe tissue-damage and maintain the inner environment's functionality, is a key motivation underlying human behavior (Damasio, 1999; cf., "core relational themes," Lazarus, 1991, p. 121). Used here, the term life-balance includes both the balance of physiological resources (cf., "allostasis," Berntson & Cacioppo, 2000) as well as the psychological balance maintained by a higher cognitive subsystem (e.g.,

"eudaimonic well-being," Schreier, 2006, p. 392; Cabanac, Pouliot, & Everett, 1997, p. 227; Deci & Ryan, 2000). On a physiological level, people must successfully exploit the external environment to balance body temperature and restore energy, thus fueling metabolic processes (cf., "alliesthesia," Cabanac, 1979, p. 7). On a psychological level, for instance, people seek abilities that enable them to maneuver through new or risky situations successfully, which demands proper mental activity (Cabanac, Pouliot & Everett, 1997). Self-determination theory (Deci & Ryan, 2002, 2000) argues that a person's psychological balance depends on the degree to which three innate psychological needs are met: autonomy (acting free of pressure, including urges caused by social norms and values that are not fully internalized), competence (ability to master relevant challenges), and relatedness (social connection to a supportive group). In this view, individuals will be psychologically balanced and maintain a high level of wellbeing to the extent that they feel autonomous, competent, and socially related (cf., Vorderer, Steen, & Chan, 2006).

Pleasure Systems

Throughout the phylogenesis of primates, inner reward-mechanisms developed to indicate the occurrence of a beneficial event (Ohler & Nieding, 2006), or more precisely, beneficial organismic change concurrent with a certain environment (Kahneman, 1999). If activated, such reward mechanisms "tagged" behavior and related situations as pleasurable (Berridge, 2001, 2002). Pleasure "seduce[d] us into good behavior" (Damasio, 1999, p. 78). Throughout the environment of evolutionary adaptedness (EEA; cf., Tooby & Cosmides, 1990), the brain developed higher cognitive functions that moderated the influence of pleasure on behavioral response (Oatley & Mar, 2005). Pleasure became one factor of the hedonic appeal of more complex affective responses that guided behavior (cf., "intrinsic pleasantness" in appraisal checks; Fredrickson, 2001, 2002; Kahneman, 1999; Scherer, 2001, p. 96).

Today's environments differ in many ways from the EEA (Vorderer, Steen, & Chan, 2006), but "pleasure [remains] the oldest and still key function regulating human behavior" (Miron, 2006, p. 344). The human reward system is heavily involved in emotional processes (Bryant & Miron, 2002; Fredrickson, 2001). Therefore, pleasure still guides the struggle for life-balance. Pleasure marks apparent progress towards physiological balance ("physiological pleasure," Cabanac et al., 1997, p. 232; "bottom-up pleasure," Bryant & Miron, 2002) and/or psychological balance (cf., "intellectual pleasure," Cabanac et al., 1997, p. 232; "top-down pleasure," Bryant & Miron, 2002; "intrinsical pleasure," Deci & Ryan, 2000; see also Fredrickson's, 2001, 2002, distinction of "sensory pleasure" and "positive emotions"). Therefore, pleasure may be considered the result of an environmental constellation or stimulus event that is appreciated (van Reekum, 2000). Pleasure and appreciation are closely connected. People often appreciate what they find pleasurable and they enjoy the pleasure if they find something they appreciate. Certainly, then, pleasure—or the appreciation of stimulus events—is key to feeling entertained.

Modern Psychology does not regard pleasure and pain as opposite end points of a bipolar scale. Rather, organisms share both a pleasure-system and a pain-system, which are only partly interconnected (cf., Bryant & Miron, 2002; Damasio, 1999; Ito & Cacioppo, 1999; Lang, 1995). Accordingly, painful events can be pleasurable, but only if the intensity of pleasure trumps that of pain (Davidson, 1992). The orchestra of only partially interconnected subsystems—a pleasure-system, a pain-system, automatic

physiological responses and higher-order mental processes—increases an organism's flexibility in the struggle for life-balance. For example, people can go beyond merely striving to stay in healthy environments that provide "pure pleasure" (Miron, 2006). They can also seek and enjoy ambivalent—or even painful—situations that promise mastery and broadening of their resources (Fredrickson, 2001; Lazarus & Folkman, 1987; Rozin, 1999). The same should be true of media entertainment.

The Media "Environment"

Entertainment arises from an interaction between users and their environment (Denham, 2004; Frueh, 2002). Therefore, we should examine the environment in order to understand media entertainment. From a birds-eye perspective, users are situated in their actual environment (e.g., their living-room), which includes media technology. These external and physical features of this setting determine the sensory stimulation of the user. However, users only respond to events that become images in their brain. Physical features of the media affect a user's bodily state, thus creating "inner" stimulus events associated with sensory stimulation (cf., Scherer, 2001). More complex appraisals build on the symbolic meaning a user decodes from a media offering (cf., Bartsch et al., 2006; Scherer, 2001).

Media users can also interpret a media environment in different reception modes: in an involved mode and in a distanced mode (Vorderer, 1993). Users who enter an *involved mode* start to think "within" the depicted mediated world (cf., "transportation," Green, Brock, & Kaufman, 2004; "presence," Hartmann, 2008a; "involvement," Wirth, 2006). Involved users respond to media environments as if they were real; that is, they temporarily seem unaware of their mediated nature (Lee, 2004). Appraisal checks should therefore relate to events within the mediated world. Involvement is likely if the media environment absorbs (Zillmann, 1988) or immerses the user's senses and provides relevant and meaningful insights to the user.

More precisely, an involved state can rest on two different qualities of the media environment (Cupchik, 2002; Zillmann, 2006). Users can be involved as they engage in the *iconic qualities* of the environment. Media representations that match the physical qualities of the imitated real-world-counterparts have high iconicity. For example, some media representations resemble spatial, real world scenarios in such a way that users automatically feel as though they are in the environment (Wirth et al., 2007). Others portray illusions of living entities so vivid that users feel co-present (Hartmann, 2008a). If iconicity is high, the environment and its stimulus events are likely to be considered quite immediate and responsive, which should affect appraisal processes as well. Nevertheless, users can also engage in the symbolic, connotative information they extract from a media offering (Zillmann, 2006). Media content can be of low iconic quality (e.g., a scribbled cartoon figure) but imply a strong symbolic meaning to the user. Symbolic meaning is high if the media environment seems informative regarding general or abstract laws of the real world (Oatley & Mar, 2005). Unlike responses to immediate stimulus events, appraisals of symbolic stimulus events involve higher-order cognitive processing and are probably more open to idiosyncratic interpretations (van Reekum, 2000; Zillmann, 2006).

In contrast to such an involved mode, users can also switch to an *analytical mode* (Vorderer, 1993) and construe the media environment from the "outside," i.e., representing the fictionality or "unrealness" of the depicted events. Appraisals should then relate to formal aspects of the media offering (Tan, 1996) or to the abstract meaning

of the exposure situation in general. Alternatively, users can temporarily move their attention away from the media completely and shift their reference frame back to the current real-world environment (Cantor, 2002).

Manipulation of the Environment's Psychological Effectiveness

The exposure situation offers vast freedom for users to effectively regulate their experiences (Schramm & Wirth, 2008; Wirth & Schramm, 2007). As long as the media environment seems more enjoyable than the "real" world, users may be prone to stay in such an involved reception mode. If they need to alter their experience, however, users can quickly adjust the reference frame of their ongoing appraisals. Before the fear that a horror movie induces becomes too disturbing, users may switch to an analytical mode ("this is just a movie") or include particular aspects of the real-world environment (e.g., turning on the lights in the living room, turning off the sound of the movie; cf. "protection cues," Schwab, 2003, p. 305; "re-appraisals," Wirth & Schramm, 2007; "coping strategies," Cantor, 2002, p. 299). By changing their salient environment, and thus the reference frame of appraisal processes, users can return to their actual surroundings, which are often more friendly and healthy. Thus, if a media representation induces overly painful or dissonant states, users may dismantle them before returning to an involved mode. In sum, users' experiences during media exposure do not rest on simple interactions with the media environment. Rather, users encounter a hybrid situation, as they switch from analytical to involved processing (Vorderer, 1993), pay and withdraw attention to and from the media environment, and continue to edit both the sensory stimulation and the meaning of their salient environment to maintain the best experience possible.

Playing With the Environment

The user's capability to edit the environment represented cognitively points to media entertainment as a playful activity (Ohler & Nieding, 2006; Vorderer, 2001). When people start to play, they deal with objects and scenarios in a safe, controlled framework. The framework builds on certain rules (e.g., pretense). What the player perceives has a psychological impact because the game creates a reality on its own that is also strongly attached to the "real" world. Due to the controlled framework, the game can end at any time. Games can be played solely in fantasy (e.g., in daydreaming, Ohler & Nieding, 2006; Singer, 1981), but exposure to media content enables such playful action as well (Vorderer, 2001). If users feel like they are in control of starting or terminating the illusion the actual media offering provides, they can let the simulation unfold in a carefree way. The medium provides tools—objects, characters, scenery, and events—and, altogether, a meaningful world, to mentally play with. Users can also experience activities and accomplishments that they cannot participate in or achieve in their actual lives. Therefore, media environments provide a playground that allows and encourages users to day-dream (Valkenburg & van der Voort, 1994). A mediated playground even trumps real-world games, as it is safer and easier to control, often easier to initiate, and able to offer a variety of experiences impossible in real-world scenarios.

Staying in Control Over the Environment

Some researchers have argued that media users can only play with a media environment if they stay autonomous and in control over the exposure situation (cf., Frueh, 2002). Leisure time, with its lack of demands and necessities, provides a good frame for playful media exposure. Still, the exposure situation and the media offering need to be under control, too. Users are able to control the experiential power of the media environment, as long as they can withdraw cognitively (Cantor, 2002). Users feel in control of the overall exposure situation, as long as they consider the situation to be free of any pressure (Frueh, 2002; Miron, 2006, p. 359). Pressure exists when users feel urged to use a medium, for example, if they follow a compulsive drive to use a medium (cf., LaRose, Lin, & Eastin, 2003), if they need to use the medium to reach an extrinsic goal (Deci & Ryan, 2000), or if they are complying with norms and values that have not been fully incorporated (Koestner & Losier, 2002). Pressure runs counter to pleasure (Deci & Ryan, 2002) and undermines the playful qualities of media exposure. A user who feels compelled to play a video game in the morning, although that violates his intrinsic norms, might still experience pleasure of relief and excitement during the game, but painful dissonance and guilt probably overshadow such positive impressions.

Personal Relevance Versus Play

Other researchers have argued that media users can only playfully engage with media content if the issues portrayed are barely relevant to them (cf., e.g., Frueh, 2002; Schwab, 2003), because only then can protective distancing strategies be applied effectively. Information is deemed irrelevant if it is not of motivational significance (Roseman, 2001). However, irrelevant events do not breed emotional responses. Therefore, enjoyable play needs to deal with issues of personal relevance. Entertaining media offerings are informative (Hartmann, 2008b; Oatley & Mar, 2005; Vorderer et al., 2006). Interesting media environments are opportunities to learn (cf., Silvia, 2006; 2005a, b). Both non-fictional and fictional media offerings can provide relevant insights (Oatley & Mar, 2005; Zillmann, 2006). Fictional media offerings are not completely artificial; they include many authentic features (e.g., humanlike interactions of characters). Compared to non-fictional representations, they often have a greater ability to explicate a deeper truth (Oatley & Mar, 2005) and to inform about general principles on a symbolic level (Zillmann, 2006, p. 216). Perceived content that becomes too relevant, however, increases pressure and undermines enjoyment. For example, a user may feel forced to learn about the plot of a mystery that he or she has not yet solved. Also, protective exit-strategies (to end the media environment experience) could fail if the content relates to problems that exist in the "real" world (cf. Zillmann, 1988). In sum, it seems likely that users' enjoyment of and entertainment from media worlds resemble a tradeoff between complete control, high distance, but little significance on the one hand, and reduced control, the possibility of experiential involvement, but opportunities to learn on the other (cf., Cupchik, 2002; Hartmann, 2008b).

EXPLAINING MEDIA ENTERTAINMENT

Regarding particular media offerings, why do some people enjoy them, while others feel overwhelming frustration and fear or are just unaffected? When is media entertaining?

Researchers have identified various pleasure-related processes thought to be involved in the formation of entertainment. Sensory stimulation and the balance of physiological resources, as well as meaningful events in the salient environment, are believed to lead to primary emotions. Users reappraise the resulting experiences in the light of their mood-regulation and their need for self-realization, often unconsciously. A feeling of entertainment often results from ongoing positive appraisals, i.e., from an appreciation of the primary affective states (Oliver, in press).

Balancing Sensory Stimulation and Physiological Resources

The "right stimulation" and a successful balancing of physiological resources appear to be a crucial mechanism for media enjoyment (cf., theory of affect dependent stimulus arrangement; Zillmann & Bryant, 1985b). A strong physiological imbalance corrupts pleasure or may even be associated with pain. Simple appraisal sequences that breed negative affect are involved in this process (Scherer, 2001). Successful recreation, however, fosters physiological pleasure (Bryant & Miron, 2002; Cabanac, 1971). The stronger the relief is, the greater the pleasure ("alliesthesia," Cabanac, 1979, p. 7). People seek optimal sensory stimulation to maintain well-balanced physiological resources (homeostasis/alleostasis, Berntson & Cacioppo, 2000; Damasio, 1999). This principle applies to diverse physiological resources and systems, including the balancing of blood glucose concentrations, body temperature, and the arousal system. The need for balance also affects the appraisal of external sensory stimulation: External stimuli that help restore balance are pleasurable, but those that promote imbalance can cause injury or pain. Media users therefore choose and arrange the physical features of their exposure situations (e.g., colors, brightness, sound-levels, dynamics) according to the sensory stimulation they desire. Not everyone, for example, appreciates the dazzling colors, surprising sounds, and the pace of cuts typical for music television after a hard working day. Some people will engage in simultaneous activities to enjoy optimal sensory stimulation.

Mood-Management Theory (Zillmann, 1988, 2000b) includes the notion that people employ media to regulate their excitation (cf., "arousal-assumption;" Knobloch-Westerwick, 2006). The theory argues "that levels of excitation that vary within a normal range constitute a necessary, though not sufficient, condition for an individual's feelings of well-being" (Bryant & Miron, 2002, p. 561). Excitatory levels must be balanced and maintained for enjoyment to occur, because it allows users to avoid noxious states. In addition, the successful restoration of balance is thought to promote enjoyment because it breeds pleasurable relief. Indeed, studies have shown that stressed persons who are overly aroused prefer calming and soothing media content (Bryant & Zillmann, 1984; see for overviews Bryant & Miron, 2002; Knobloch-Westerwick, 2006). Likewise, bored and understimulated people prefer exciting media offerings capable of increasing their level of arousal.

The balancing of sensory stimulation and exhausted physiological resources seems to foster pleasure that adds to the overall feeling of being entertained. However, we regard both to be necessary but not sufficient mechanisms of entertainment. Relaxing in a wheel-chair, eating tasty food, or balancing physiological resources in an exposure situation alone does not guarantee entertainment. In addition, and perhaps more importantly, an optimal level of psychological stimulation is necessary to feel entertained.

Primary Emotional Responses to the Salient Environment

If the media environment becomes salient in the mind of the involved user, it replaces the actual environment as the primary reference frame of ongoing appraisals (Wirth & Schramm, 2007; Zillmann, 2006). Processes of character- and group-perception (cf., "parasocial processing," Hartmann, 2008b) may divide the mentally unfolding world into good, neutral, and bad forces ("affective disposition," Raney & Bryant, 2002; Zillmann, 2006). Users may start to feel that they accompany their favorite characters; empathetically, users hold the perspectives of liked characters, which results in a sharing of motivational dispositions, i.e. of goals, hopes, and fears. The events that happen in the mediated world begin to matter and take on meaning. They become emotionally significant ("internal emotions," Oatley, 1994). Some events of the media world may trigger reflexive emotional responses that are rapidly processed (e.g., responses to familiarity and novelty or immediate danger; Cantor, 2002; Miron, 2006). However, most events will probably involve more complex and multi-sequence appraisals (Scherer, 2001). Such events are not only more open to culture-specific or idiosyncratic (and thus also gender- and age-specific) interpretations (van Reekum, 2000), but they might also allow the user to include knowledge of the mediated nature of the event (Wirth & Schramm, 2007).

The Pleasure of Comprehension

"Familiar things tend to be enjoyable, whereas new things tend to be interesting" (Silvia, 2006, p. 25; Reeve, 1989). The identification of novel, unfamiliar stimuli always implies some potential threat (Zajonc, 2001), at least in the form of a cognitive challenge that cannot be met. Familiar aspects, in contrast, are predictable and can be competently processed. The simple pleasure of *comprehension* should apply to the perception of media environments as well. The mere identification of familiar aspects—even if they are disliked on a symbolical level—should evoke mild pleasure and appreciation.

Interest, or *curiosity*, is a related emotion in entertainment media use (cf., Silvia, 2006, 2005a, b). Interest motivates the organism to focus on potentially relevant stimuli that are novel or not fully understood—so-called incongruencies or cognitive challenges (Deci & Ryan, 2002)—but appear to be understandable (Silvia, 2006). Accordingly, if an obscure event is novel, and one's cognitive abilities seem sufficient to cope with the novelty, interest results (Silvia, 2005a). Simple and overly familiar stimuli are not novel and, therefore, barely interesting. Very complex or strong incongruencies, however, are often too challenging cognitively and thus of no interest as well. Interest is strongest if the comprehension skills are just sufficient to master an incongruency (Groeben & Vorderer, 1988).

Heightened arousal accompanies interest. According to Berlyne (1960), comprehension of a once unfamiliar stimulus—or mastery of a cognitive challenge—is pleasurable as it helps to reduce the distress that had been caused by incongruencies. An alternative explanation refers to the growth of the organism (Deci & Ryan, 2000; Reeve, 1989). Interest guides learning processes. Learning helps the human organism gain knowledge about the environment, and thus is key to adaptation throughout ontogenesis. Therefore, the pleasure system rewards comprehension. The excitement caused by incongruent stimuli mingles with reappraisal of the situation once a stimulus is understood, resulting in mild positive affect.

Entertaining media offerings often offer a variety of novel characters, situations, and

background scenarios that elicit interest. If novel stimuli constitute cognitive challenges, many media offerings can be regarded as a chain of challenges that impinge on the user. If users have the comprehension skills needed to master the chain of challenges, they are likely to enter a *flow state* (cf., Sherry, 2004) that is characterized by pleasurable absorption in the activity and neglect of time.

Sudden resolution of cognitive incongruencies often causes a rush of euphoria that includes *joy and laughter* (Berlyne, 1969; Zillmann, 2000a). Humor (including funny jokes) develops from a puzzling incongruency that suddenly is resolved. The resolution is often due to a plot or punch-line that allows the audience to comprehend and to solve such incongruency. But in the case of nonsense humor, a resolution might just as well be the realization that there is nothing to resolve (cf. Zillmann, 2000a). Norm-violations and sexual or aggressive content heighten arousal and thus fuel the mild euphoria of a sudden comprehension (cf. Berlyne, 1969), especially for sensation-seekers (Zuckerman, 2006). Humor is omnipresent in many entertaining media offerings, from comedy television shows to action movies, or comedy movies to funny cartoons and books (Zillmann & Bryant, 1991).

Positive Primary Emotions

In general, positive primary emotions result from events that appear to serve a person's motivations or goals, i.e., to broaden and to build his or her resources (Fredrickson, 2001). Media entertainment offerings trigger *happiness* through various means, but the user's perception of "making reasonable progress toward the realization of a goal" is always key (Lazarus, 2001, p. 64). Happiness results from the perception of making reasonable progress toward a goal (Lazarus, 1991; Roseman, 2001). The pleasure of understanding familiar things, the enjoyment of resolving incongruencies, and the humor from comprehension can all be considered specific manifestations of this process. Euphoric happiness can arise from achieving a good outcome in an arousing conflict (Berlyne, 1960; Zillmann, 1983), like in dramatic narratives (Vorderer & Knobloch, 2000), including fictional drama, sports (Zillmann, Bryant, & Sapolsky, 1989) or video games. Happiness can occur as pride, if users attribute the successful outcome to their own efforts (Roseman, 2001; in sports: "basking in reflected glory," Cialdini et al., 1976). Users can even feel malicious happiness, i.e., *schadenfreude*, over others' misfortune if they are unaffiliated with the target individual and the failure seems deserved, like in slapstick comedies (van Dijk, Ouwerkerk, Goslinga & Nieweg, 2005; "disparagement theory of humor," Zillmann, 2000a; Zillmann & Bryant, 1991).

Negative Primary Emotions

In general, negative emotions result from events that imply a serious drawback from goals, violation of rules, or loss of resources. Common negative primary emotions in media entertainment include sadness, anger, fear, fright, shame, and distressful suspense. Those who view tearjerkers and related genres feel *sad*, because they or a closely affiliated person or group perceive a remarkable loss of resources or another strong motivation-incongruent backdrop while, at the same time, the cause of this loss seems to be out of anyone's control (Lazarus, 1991; Roseman & Smith, 2001). Saddening media offerings often deal with the tragic loss of a liked person, either through death or by divorce (cf. Oliver, 1993). *Anger* occurs when people perceive themselves (in case of internally directed anger) or external agents (in case of externally directed anger) to

cause the loss (Berkowitz & Harmon-Jones, 2002; Roseman & Smith, 2001). Anger is probably a common emotion in conflicts that include unjust harmful behavior against liked persons or groups (e.g., in sports and other dramas). *Fear and fright reactions* follow from simple appraisals that mark a situation as immediately physically threatening for oneself or an affiliated person or group (see van Reekum, 2000); the horror genre typically stimulates these emotions (Cantor, 2002). Fear-inducing situations that seem to be under control are not immediately endangering and cause positive *thrill* (Balint, 1959; Rozin, 1999), which probably is typical for fast-paced action movies (Zuckerman, 2006). Those who witness others perform norm-incongruent behaviors on shows broadcasted live, such as affect-talks (Bente & Feist, 2000) and talent shows (Nieweg et al., 2006), frequently report shame. Another central primary emotion for many entertaining media offerings is *suspense* (Carroll, 1996; Vorderer & Knobloch, 2000; Vorderer, Wullf & Friedrichsen, 1996). In general, suspense is a state of heightened arousal that results from uncertainty about a motivationally relevant outcome. It is often felt as negative distress (Zillmann, 1996). For suspense to develop, the media offering must tell a narrative, i.e., a causally and chronologically related order of events. It is possible to distinguish between two different structures of suspense-inducing narratives. The narrative either can start with the plot and then question how the plot came to be (here uncertainty exists about what has happened), or anticipate a possible plot, by suggesting a potentially desirable outcome with a certain likelihood (here uncertainty exists about what will happen; cf., affective disposition theory of drama, Zillmann, 1996; Raney & Bryant, 2002).

Reappraising an Emotional Response

In media exposure, the physical environment affects a user's physiology, just like the salient mentally represented environment, the appraisal of which leads to primary emotions. Several researchers, in both Psychology (Mayer & Gaschke, 1988) as well as in Communication Research (Bartsch et al., 2008; Mangold, Unz, & Winterhoff-Spurk, 2001; Oliver, 1993; Wirth & Schramm, 2007), have noted that primary emotions themselves can be subject to reappraisals, which give the occurrence of the affective state a broader context (e.g., the meaning of the exposure situation) and again check for novelty, goal-conduciveness, norm-congruency, controllability, etc. Reappraisals of emotions are thought to result in a more stable mood-like meta-emotion ("background emotion;" Damasio, 1999, p. 51). Feeling entertained by a media offering means meta-level appreciation of the dynamic chain of rather automatic affective states on the primary level.

Why Reappraisals?

Reappraisals connect rather automatic and environment-controlled affective states to higher-order cognitive processes of an elaborate mental system, which links them to more complex planning for the achievement of ideosyncratic short- and long-term goals (cf., Roseman, 2001). It is hard to interrupt the process of automatic primary emotions; "we are about as effective at stopping an emotion as we are at preventing a sneeze" (Damasio, 1999, p. 49). Reappraisals allow the use of phylogenetically more recent and, in adaptive hindsight, superior capabilities to regulate behavior. The organism is able to disengage from behavioral tendencies under environmental control by re-evaluating automatic primary emotions on the basis of more elaborate short- and long-term goals.

Affective responses can be re-evaluated on the basis of a deeper ideosyncratic meaning (Rozin, 1999; Scheele & DuBois, 2006; Skaggs & Baron, 2006) and associated goals (cf., Bartsch et al., 2008) instead of immediate behavioral reactions. Therefore, a recontemplation of spontaneous affect also implies second thoughts on the need and opportunities to cope with a situation (cf., secondary appraisals and coping, Lazarus & Folkman, 1987). Due to reappraisals, users can reconsider the valence of emotions initially felt, leading to the enjoyment of fear (Cantor, 2002) and of pain (Rozin, 1999), or the appreciation of sadness (Oliver, 1993). It is due to reappraisals that entertainment really becomes meaningful.

Reappraisal and Mood-Regulation

Reappraisals can check whether primary emotions promote short-term goals (see "goal-conduciveness," Barsch et al., 2008). In the context of entertainment exposure, mood-regulation seems to be of particular importance. People often turn to the media because they strive for a positive target mood (Zillmann, 1988), but sometimes they might seek a neutral or negative mood as well (Hess, Kacen, & Kim, 2006; Knobloch-Westerwick, 2006; Skaggs & Baron, 2006). Users enjoy their emotional responses to the hybrid environment of the exposure situation, if they imply a move towards their target mood. If the emotional responses run counter to the target mood, however, they deem events unpleasant.

A reappraisal of emotions implies that users also consider whether they need to cope with their emotions, and if so, how to cope with them (Lazarus & Folkman, 1987). If a primary emotion seems to violate a target mood seriously, users are likely to act (cf., Schramm & Wirth, 2008). One effective strategy to dismantle unappreciated negative affect, for example, is to change the reference frame, i.e., the reception mode (Cantor, 2002; Cupchik & Kemp, 2000). By including some of the actual exposure situation, users distance themselves from the media environment. This reduces emotional effects, while responsiveness to the real-world surrounding increases. Choosing the best reference frame might also fuel positive emotions. When the media world triggers less pleasure than users had hoped, they may try to make the best out of it, for example, by appreciating the media environment's aesthetic appeal (Cupchik & Kemp, 2000; Tan, 1996) or by reflecting on the overall positive carefree exposure situation.

Reappraisal and Self-Realization

Human beings need a deeper meaning to their life (Scheele & DuBois, 2006; Schwab, 2003; Skaggs & Baron, 2006). The formation of such a meaning builds on making sense of the evolutionary heritage that so vastly affects one's own behavior. Understanding one's purpose in the world is crucial for successful adaptation throughout life. People therefore strive to develop an identity, i.e., a valid picture of themselves in the world. They also pursue the long-term goal of progress toward their perception of what is ideal. Accordingly, self-determination-theory (Deci & Ryan, 2002, 2000) dwells on Aristotle's notion that psychological growth and integration lie at the heart of human striving. Individuals are thought to strive for growth in the complexity and variety of their abilities and more coherent knowledge about themselves. Events that promise movement towards these long-term goals (cf., Zillmann, 2000b) are often challenging, but also rewarding, as they help people to understand themselves in a better way.

Primary emotions are highly informative events. They reveal how the more archaic

bodily instances of behavior control interpret a situation (Schwab, 2008). Being attentive to the unfolding primary emotions should therefore be an effective mechanism that leads to self-realization. In addition, primary emotions can be challenges on their own (Bartsch et al., 2008; Rozin, 1999). Mastering emotional challenges with higher-order cognitive control demonstrates existing skills, and if the emotion is novel, it can reveal enhanced skills as well. Media entertainment products are designed to trigger primary emotions. Therefore, entertainment products can promote self-realization (Bosshart & Macconi, 1989). For example, frequent users of horror movies may be satisfied that they can actualize their skill to stand intense fear (Cantor, 2002). Or, if the fear seems novel, users might feel proud for successfully mastering the emotional challenge. Oliver (1993) links the enjoyment of sad primary emotions during movie exposure to self-realization as well. Sad emotions can inform a user about internalized norms and values (e.g., to feel pity if someone suffers) and thus direct attention to meaningful facets of oneself (cf., Scheele & DuBois, 2006). Primary emotions might also help to actualize and identify one's group-affiliation (Bryant & Miron, 2002).

WHAT IS MEDIA ENTERTAINMENT THEN?

Media offerings, or more precisely situations that include the use of media offerings, are entertaining if they satisfy a user's need to maintain physiological and psychological

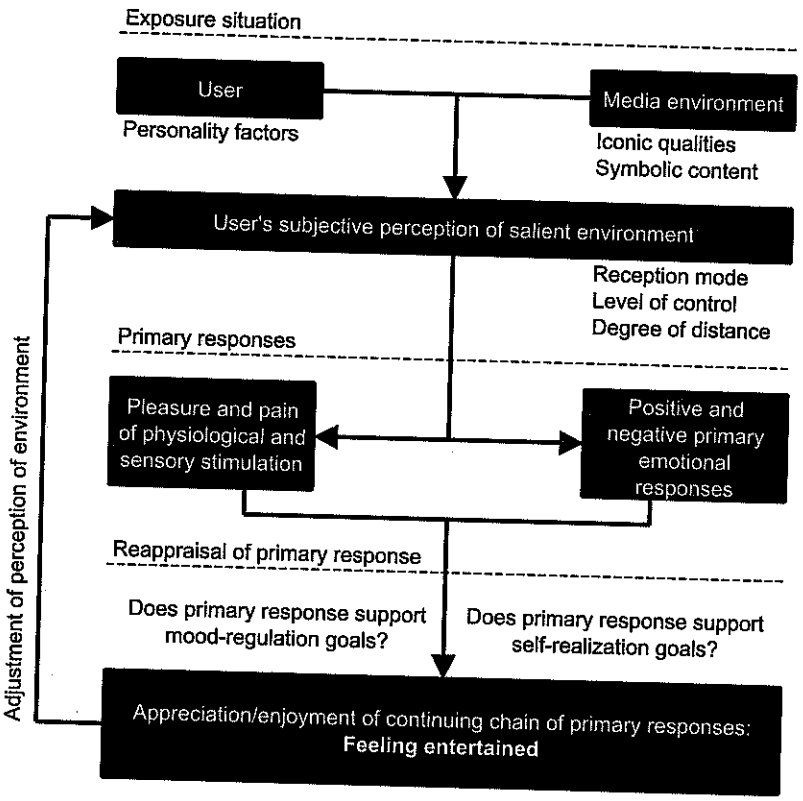


Figure 24.1 Formation of the Feeling to be Entertained by Media

balance. Successful homeostatic regulation causes pleasure, whereas sensory stimulation is unpleasant if it fosters severe imbalance. Comprehension and resolution of cognitive incongruencies are likely to result in positive affect, whereas a lack of cognitive challenges, or incongruencies that are overly complex, create aversion or disinterest. The user's involvement in the media offering triggers both positive and negative primary emotions. Depending on the genre or type of the media offering, certain discrete primary emotions will be characteristic for the exposure situation. Primary emotions are reappraised in light of two motivational stances, mood-regulation and self-realization. The reappraisal fuels a meta-emotion or mood-like background emotion. Enjoyment occurs on a meta-level when the user appreciates his or her primary emotions as motivation-congruent, which includes compliance to intrinsic norms. Users feel entertained over a certain episode (that might resemble the full exposure situation), if they enjoy the ongoing chain of their own primary affective responses. The meta-emotion "entertainment" then rests on the appreciation of both the continuing chain of sensory stimulation and primary emotions stimulated by the present environment and edited by the mood-regulating user throughout a certain episode (see Figure 24.1). Appreciation may depend on how the stimulated affective state corresponds to target-moods and/or the need for self-realization. With varying target-moods and identity processes, entertainment should therefore differ intra-individually (e.g., throughout the day or life-span) as well as inter-individually (e.g., across ages or gender).

References

Balint, M. (1959). *Thrills and regression.* New York: International University Press.

Bartsch, A., Mangold, R., Viehoff, R., & Vorderer P. (2006). Emotional gratifications during media use—an integrative approach. *Communications, 31,* 261–278.

Bartsch, A., Vorderer, P., Mangold, R., & Viehoff, R. (2008). Appraisal of emotions in media use: Towards a process model of meta-emotion and emotion regulation. *Media Psychology, 11,* 7–27.

Bente, G., & Feist, A. (2000). Affect talk and its kin. In D. Zillmann & P. Vorderer (Eds.), *Media entertainment. The psychology of its appeal* (pp. 113–134). Mahwah, NJ: Erlbaum.

Berkowitz, L., & Harmon-Jones, E. (2002). Toward an understanding of the determinants of anger. *Emotion* 4(2), 107–130.

Berlyne, D. E. (1960). *Conflict, arousal, and curiosity.* New York: McGraw-Hill.

Berlyne, D. E. (1969). Laughter, humor, and play. In G. Lindzey & G. Aaronson (Eds.), *The handbook of social psychology: Vol. 3. The individual in a social context* (2nd ed., pp. 795–852). Reading, MA: Addison-Wesley.

Berntson, G. G., & Cacioppo, J. T. (2000). From homeostasis to allodynamic regulation. In J. T. Cacioppo, L. G. Tassinary, & G. G. Berntson (Eds.), *Handbook of psychophysiology* (pp. 459–481). Cambridge, UK: Cambridge University Press.

Berridge, K. C. (2001). Reward learning: Reinforcement, incentives, and expectations. In D. L. Medin (Ed.), *The Psychology of Learning and Motivation* (Vol. 40, pp. 223–278). San Diego: Academic Press.

Berridge, K. C. (2002). Pleasures of the brain. *Brain and Cognition, 52,* 106–128.

Bosshart, L., & Macconi, I. (1989). Media entertainment. *Communication Research Trends, 18*(3), 3–8.

Bryant, J., & Miron, D. (2002). Entertainment as media effect. In J. Bryant & D. Zillmann (Eds.), *Media effects* (2nd ed., pp. 549–582). Mahwah, NJ: Erlbaum.

Bryant, J., & Zillmann, D. (1984). Using television to alleviate boredom and stress. Selective exposure as a function of endorsed excitational states. *Journal of Broadcasting, 28,* 1–20.

Bryant, J., Roskos-Ewoldsen, D. R., & Cantor, J. (Eds.) (2003). *Communication and emotion: Essays in honor of Dolf Zillmann*. Mahwah, NJ: Erlbaum.

Cabanac, M. (1971). Physiological role of pleasure. *Science, 173*, 1103–1107.

Cabanac, M. (1979). Sensory pleasure. *The Quarterly review of biology, 54*, 1–29.

Cabanac, M., Pouliot, C., & Everett, J. (1997). Pleasure as a sign of mental activity. *European Psychologist, 2*(3), 226–234.

Cantor, J. (2002). Fright reactions to mass media. In J. Bryant & D. Zillmann (Eds.), *Media Effects* (2nd ed., pp. 287–306). Mahwah, NJ: Erlbaum.

Carey, J. (1993). *The intellectuals and the masses: Pride and prejudice among the literary intelligentsia, 1880–1939*. New York: St. Martin's Press.

Carroll, N. (1996). The paradox of suspense. In P. Vorderer, H.-J. Wullf, & M. Friedrichsen (Eds.), *Suspense: Conceptualizations, theoretical analyses, and empirical explorations* (pp. 71–91). Mahwah, NJ: Erlbaum.

Cialdini, R. B., Borden, R. J., Thorne, A., Walker, M. R., Freeman, S., & Sloan, L. (1976). Basking in reflected glory: Three (football) field studies. *Journal of Personality and Social Psychology, 34*, 366–375.

Cupchik, G. C. (2002). The evolution of psychical distance as an aesthetic concept. *Culture & Psychology, 8*, 155–187.

Cupchik, G. C., & Kemp, S. (2000). The aesthetics of media fare. In D. Zillmann & P. Vorderer (Eds.), *Media entertainment. The psychology of its appeal* (pp. 249–264). Mahwah, NJ: Erlbaum.

Damasio, A. (1999). *The Feeling of What Happens*. San Diego et al.: Harcourt.

Davidson, R. J. (1992). Anterior cerebral asymmetry and the nature of emotion. *Brain and Cognition, 65*, 245–268.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227–268.

Deci, E. L., & Ryan, R. M. (2002). (Eds.). *Handbook of self-determination research*. Rochester, NY: University of Rochester Press.

Denham, B. E. (2004). Toward an explication of media enjoyment: The synergy of social norms, viewing situations, and program content. *Communication Theory, 4*, 370–387.

Engel, M. (1997). *Tickle the public: 100 years of the popular press*. London: Indigo.

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*, 218–226.

Fredrickson, B. L. (2002). Positive emotions. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 120–134). London: Oxford University Press.

Frueh, W. (2002). *Unterhaltung durch das Fernsehen. Eine molare Theorie (A multi-faceted theory of entertainment television)*. Konstanz: UVK.

Green, M. C., Brock, T. C., & Kaufman, G. F. (2004). Understanding media enjoyment: The role of transportation into narrative worlds. *Communication Theory, 56*(1), 163–183.

Groeben, N., & Vorderer, P. (1988). *Leserpsychologie: Lesemotivation—Lektürewirkung*. [Psychology of readers: Reading motivation—reading effects]. Münster: Aschendorff.

Hartmann, T. (2008a). Presence. In Wolfgang Donsbach (Ed.), *The International Encyclopedia of Communication*. Blackwell Reference Online. Retrieved from http://www.communication encyclopedia.com (18 September 2008).

Hartmann, T. (2008b). Parasocial Interactions and New Media Characters. In E. A. Konijn, S. Utz, M. Tanis, & S. Barnes (Eds.). *Mediated Interpersonal Communication* (pp. 177–199). Mahwah, NJ: Erlbaum.

Herzog, H. (1944). What do we really know about daytime serial listeners? In P. F. Lazarsfeld, B. Berelson, & F. N. Stanton (Eds.), *Radio Research, 1942–43* (pp. 3–33). New York: Duell, Sloan and Pearce.

Hess, J. D., Kacen, J. J., & Kim, J. (2006) Mood-management dynamics: The interrelationship between moods and behaviours. *British Journal of Mathematical and Statistical Psychology, 59*, 347–378.

Ito, T. A., & Cacioppo, J. T. (1999). The psychophysiology of utility appraisals. In D. Kahneman, E. Diener, & H. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 470–488). New York: Russell Sage Foundation.

Kahneman, D. (1999). Objective Happiness. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 3–25). New York: Sage.

Katz, E., & Foulkes, D. (1962). On the use of mass media for escape: Clarification of a concept. *Public Opinion Quarterly, 26*, 377–388.

Klimmt, C., & Vorderer, P. (in press). Media Entertainment. In C. Berger, M. Roloff, & D. Roskos-Ewoldsen (Eds.), *Handbook of Communication Science* (2nd ed.). London: Sage.

Knobloch-Westerwick, S. (2006). Mood management: Theory, evidence, and advancements. In J. Bryant & P. Vorderer (Eds.), *Psychology of entertainment* (pp. 239–254). Mahwah, NJ: Erlbaum.

Koestner, R., & Losier, G. F. (2002). Distinguishing three ways of being internally motivated: A closer look at introjection, identification, and intrinsic motivation. In L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 101–122). Rochester, NY: University of Rochester Press.

Lang, P. (1995). The emotion probe: Studies of motivation and attention. *American Psychologist, 50*, 372–385.

LaRose, R., Lin, C. A., & Eastin, M. S. (2003). Unregulated internet usage: Addiction, habit, or deficient self-regulation? *Media Psychology, 5*, 225–253.

Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality, 1*, 141–169.

Lazarus, R. S. (1991). *Emotion and Adaptation*. New York: Oxford University Press.

Lazarus, R. S. (2001). Relational meaning and discrete emotions. In K. R. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal processes in emotion: Theory, methods, research* (pp. 37–67). New York: Oxford University Press.

Lee, K. M. (2004). Presence, explicated. *Communication Theory, 14*, 27–50.

Mangold, R., Unz, D., & Winterhoff-Spurk, P. (2001). Zur Erklärung emotionaler Medienwirkungen: Leistungsfähigkeit, empirische Überprüfung und Fortentwicklung theoretischer Ansätze. In P. Rössler, U. Hasebrink, & M. Jäckel (Eds.), *Theoretische Perspektiven der Rezeptionsforschung* (pp. 163–180). München: Fischer.

Mayer, J. D., & Gaschke, Y. N. (1988). The experience and meta-experience of mood. *Journal of Personality and Social Psychology, 55*, 105–111.

Miron, D. (2006). Emotion and cognition in entertainment. In J. Bryant & P. Vorderer (Eds.), *Psychology of entertainment* (pp. 343–364). Mahwah, NJ: Erlbaum.

Nieweg, M., Van Dijk, W. W., & Ouwerkerk, J. W. (2006). Waarom lachen we om Idols? De rol van zelf-regulatie bij het ervaren van leedvermaak. In R. W. Holland, J. W. Ouwerkerk, R. Ruiter, C. Van Laar, & J. Ham (Eds.), *Jaarboek Sociale Psychologie 2005* (pp. 341–348). Groningen: ASPO.

Oatley, K., & Mar, R. A. (2005). Evolutionary pre-adaptation and the idea of character in fiction. *Journal of Cultural and Evolutionary Psychology, 3(2)*, 181–196.

Oatley, K. (1994). A taxonomy of the emotions of literary response and a theory of identification in fictional narrative. *Poetics, 23*, 53–74.

Ohler, P., & Nieding, G. (2006). Why Play? An Evolutionary Perspective. In P. Vorderer & J. Bryant (Eds.), *Playing Video Games: Motives, Responses, and Consequences* (pp. 101–113). Hillsdale, NJ: Erlbaum.

Oliver, M. B. (1993). Exploring the paradox of the enjoyment of sad films. *Human Communication Research, 19*, 315–342.

Oliver, M. B. (in press). Affect as a predictor of entertainment choice: The utility of looking beyond pleasure. In T. Hartmann (ed.), *Evolving perspectives on media choice*. New York: Routledge.

Raney, A., & Bryant, J. (2002). Moral judgment and crime drama: An integrated theory of enjoyment. *Journal of Communication, 52(2)*, 402–415.

Reeve, J. (1989). The interest-enjoyment distinction in intrinsic motivation. *Motivation and emotion, 17*, 353–375.

Roseman, I. J. (2001). A model of appraisal in the emotion system. In K. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal processes in emotion. Theory, methods, research* (pp. 68–91). New York: Oxford University Press.

Roseman, I. J., & Smith, C. A. (2001). Appraisal theory. In K. Scherer, A. Schorr, & T. Johnstone (Eds.). *Appraisal processes in emotion: Theory, methods, research* (pp. 3–19). Oxford: Oxford University Press.

Rozin, P. (1999). Preadaptation and the puzzles and properties of pleasure. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-Being: The foundations of hedonic psychology* (pp. 109–133). New York: Sage.

Ryan, R. M., Rigby, C. S., & Przybylski, A. (2006). The motivational pull of video games: A self-determination theory approach. *Motivation and Emotion, 30*, 347–363.

Scheele, B., & DuBois, F. (2006). Catharsis as a moral form of entertainment. In J. Bryant & P. Vorderer (Eds.), *Psychology of entertainment* (pp. 405–422). Mahwah, NJ: Erlbaum.

Scherer, K. R. (2001). Appraisal considered as a process of multilevel sequential checking. In K. R. Scherer, A. Schorr, & T. Johnstone (Eds.). *Appraisal processes in emotion: Theory, Methods, Research* (pp. 92–120). New York: Oxford University Press.

Scherer, K. (2005). What are emotions? And how can they be measured? *Social Science Information, 44*, 695–729.

Schramm, H., & Wirth, W. (2008). A case for an integrative view on affect regulation through media usage. *Communications: The European Journal of Communication Research, 33*(1), 27–46.

Schreier, M. (2006). (Subjective) well-being. In J. Bryant, & P. Vorderer (Eds.), *Psychology of entertainment* (pp. 389–404). Mahwah, NJ: Erlbaum.

Schulkin, J. (2004). Introduction. In J. Schulkin (Ed.), *Allostasis, Homeostasis, and the Costs of Adaptation* (pp. 1–17). Cambridge: Cambridge University Press.

Schwab, F. (2003). Unterhaltung. Eine evolutionspsychologische Perspektive. In W. Frueh & H.-J. Stiehler (Eds.), *Theorie der Unterhaltung. Ein interdisziplinärer Diskurs* [A theory of entertainment] (pp. 258–324). Cologne: Von Halem Verlag.

Schwab, F. (2008). Exposure to communication content: Evolutionary theory. In W. Donsbach (Eds.), *The Blackwell International Encyclopedia of Communication*. Oxford: Blackwell.

Sherry, J. L. (2004). Flow and media enjoyment. *Communication Theory, 14*(4), 328–347.

Silvia, P. (2006). *Exploring the psychology of interest*. New York: Oxford University Press.

Silvia, P. J. (2005a). What is interesting? Exploring the appraisal structure of interest. *Emotion, 5*(1), 89–102.

Silvia, P. J. (2005b). Emotional responses to art: From collation and arousal to cognition and emotion. *Review of General Psychology, 9*(4), 342–357.

Singer, J. L. (1981). *Daydreaming and fantasy*. Oxford, UK: Oxford University Press.

Skaggs, B. G., & Baron, C. R. (2006). Searching for meaning in negative events: concept analysis. *Journal of Advanced Nursing, 53*(5), 559–570.

Smith, C. A., & Kirby, L. D. (2001). Toward delivering on the promise of appraisal theory. In K. R. Scherer, A. Schorr, & T. Johnstone (Eds.). *Appraisal processes in emotion: Theory, methods, research* (pp. 121–138). New York: Oxford University Press.

Tan, E. S. (1996). *Emotion and the structure of narrative film: Film as an emotion machine*. Mahwah, NJ: Erlbaum.

Tannenbaum, P. H. (Ed.). (1980). *The entertainment functions of television*. Hillsdale: Erlbaum.

Tooby, J., & Cosmides, L. (1990). The past explains the present: emotional adaptations and the structure of ancestral environments. *Ethology and Sociobiology, 11*, 375–424.

Valkenburg, P. M., & van der Voort, T. H. A. (1994). Influence of TV on daydreaming and creative imagination: A review of research. *Psychological Bulletin, 116*(2), 316–339.

van Dijk, W. W., Ouwerkerk, J. W., Goslinga, S. & Nieweg, M. (2005). Deservingness and Schadenfreude. *Cognition and emotion, 19*(6), 933–939.

van Reekum, C. M., & Scherer, K. R. (1997). Levels of processing for emotion-antecedent appraisal. In G. Matthews (Ed.), *Cognitive science perspectives on personality and emotion*. (pp. 259–300). Amsterdam: Elsevier Science.

van Reekum, C. M. (2000). *Levels of processing in appraisal: Evidence from computer game generated emotions*. Doctoral dissertation, University of Geneva, Switzerland. Retrieved from http://www.unige.ch/cyberdocuments/theses2000/VanReekumC/these.html (September 2007).

Vorderer, P. (1993). Audience involvement and program loyalty. *Poetics, 22*, 89–98.

Vorderer, P. (2001). It's all entertainment—sure. But what exactly is entertainment? *Poetics, 29*, 247–261.

Vorderer, P., Klimmt, C., & Ritterfeld, U. (2004). Enjoyment: At the heart of media entertainment. *Communication Theory, 14*(4), 388–408.

Vorderer, P., & Knobloch, S. (2000). Conflict and suspense in drama. In D. Zillmann & P. Vorderer (Eds.), *Media entertainment. The psychology of its appeal* (pp. 59–73). Mahwah, NJ: Erlbaum.

Vorderer, P., Steen, F. F., & Chan, E. (2006). Motivation. In J. Bryant & P. Vorderer (Eds.), *Psychology of entertainment* (pp. 3–17). Mahwah, NJ: Erlbaum.

Vorderer, P., Wullf, H. J., & Friedrichsen, M. (Eds.). (1996). *Suspense: Conceptualizations, theoretical analyses, and empirical explorations*. Mahwah, NJ: Erlbaum.

Wirth, W., & Schramm, H. (2007). Emotionen, Metaemotionen und Regulationsstrategien bei der Medienrezeption. Ein integratives Modell. In W. Wirth, H.-J. Stiehler, & C. Wünsch (Eds.), *Dynamisch-transaktional denken: Theorie und Empirie der Kommunikationswissenschaft* (pp. 153–184). Köln: Halem Verlag.

Wirth, W. (2006). Involvement. In J. Bryant & P. Vorderer (Eds.), *Psychology of entertainment* (pp. 199–213). Mahwah, NJ: Erlbaum.

Wirth, W., Hartmann, T., Boecking, S., Vorderer, P., Klimmt, C., Schramm, H., Saari, T., Laarni, J., Ravaja, N., Gouveia, F. R., Biocca, F., Gouveia, L. B., Rebeiro, N., Sacau, A., Jäncke, L., Baumgartner T., & Jäncke, P. (2007). A process model of the formation of spatial presence experiences. *Media Psychology, 9*, 493–525.

Zajonc, R. B. (2001). Mere exposure. A gateway to the subliminal. *Current directions in psychological science, 10*, 224–228.

Zillmann, D. (1983). Transfer of excitation in emotional behavior. In J. T. Cacippo & R. E. Petty (Eds.), *Social psychophysiology: A sourcebook* (pp. 215–240). New York: Guilford Press.

Zillmann, D. (1988). Mood management: Using entertainment to full advantage. In L. Donohew, H. E. Sypher & E. T. Higgins (Hrsg.), *Communication, social cognition, and affect* (S. 147–171). Hillsdale, NJ: Erlbaum.

Zillmann, D. (1991). Empathy: Affect from bearing witness to the emotions of others. In J. Bryant & D. Zillmann (Eds.), *Responding to the screen* (pp.135–168). Hillsdale, NJ: Erlbaum.

Zillmann, D. (1996). The psychology of suspense in dramatic exposition. In P. Vorderer, H. J. Wulff, & M. Friedrichsen (Eds.), *Suspense: Conceptualizations, theoretical analyses, and empirical explorations* (pp. 199–231). Mahwah, NJ: Erlbaum.

Zillmann, D. (2000a). Humor and comedy. In D. Zillmann & P. Vorderer (Eds.), *Media entertainment. The psychology of its appeal* (pp. 37–57). Mahwah, NJ: Erlbaum.

Zillmann, D. (2000b). Mood management in the context of selective exposure theory. In M. E. Roloff (Ed.), *Communication Yearbook 23* (pp. 103–123). Thousand Oaks, CA: Sage.

Zillmann, D. (2006). Dramaturgy for Emotions from Fictional Narration. In J. Bryant & P. Vorderer (Eds.), *Psychology of entertainment* (pp. 215–238). Mahwah, NJ: Erlbaum.

Zillmann, D., & Bryant, J. (1985a). Selective-exposure phenomena. In D. Zillmann & J. Bryant (Eds.), *Selective Exposure to Communication* (pp. 1–10). Hillsdale, NJ: Erlbaum.

Zillmann, D., & Bryant, J. (1985b). Affect, mood, and emotion as determinants of selective exposure. In D. Zillmann & J. Bryant (Eds.), *Selective exposure to communication* (pp. 157–190). Hillsdale, NJ: Erlbaum.

Zillmann, D., & Bryant, J. (1991). Responding to comedy: The sense and nonsense in humor. In J. Bryant & D. Zillmann (Eds.), *Responding to the screen: Reception and reaction processes* (pp. 261–279). Hillsdale, NJ: Erlbaum.

Zillmann, D., Bryant, J., & Sapolsky, B. S. (1989). Enjoyment from sports spectatorship. In J. H. Goldstein (Ed.), *Sports, games, and play: Social and psychological viewpoints* (2nd ed., pp. 241–278). Hillsdale, NJ: Erlbaum.

Zillmann, D., & Vorderer, P. (Eds.). (2000). *Media entertainment. The psychology of its appeal.* Mahwah, NJ: Erlbaum.

Zuckerman, M., (2006). Sensation seeking in entertainment. In J. Bryant & P. Vorderer (Eds.), *Psychology of entertainment* (pp. 376–389). Mahwah, NJ: Erlbaum.